

REMARKS

Amendment to Drawings

Applicant has discovered a reference numeral error in Figure 4, and accordingly submits a new sheet of drawing with Figure 4, wherein the reference numeral "56" has been changed to --55--. This correction to the reference numeral makes Figure 4 consistent with the Specification at page 5, lines 19 and 23. Applicant has also added the reference numeral "56" in Figure 4 to designate the hole in the cam 70 which receives the spindle, as described at page 5, lines 18-22. No other changes have been made to the drawings. Acceptance of this drawing correction is respectfully requested.

Amendment to the Specification

The Specification has been objected to for several reasons. Applicant has amended the Specification to provide a description of Figure 7A, as requested by the Examiner. With respect to the "stop" recited in claims 6, 8 and 19, Applicant notes the stops 38 discussed in the Specification at page 5, line 28 are shown in the drawings in Figures 6, 7 and 8. Applicant has also amended page 5 of the Specification by changing the reference numeral "58" to --70-- in line 18 so as to accurately designate the prior art cam shown in Figure 4.

Rejection of Claims

Claims 1-40 have been objected to due to numerous informalities. Applicant has amended the claims so as to overcome these informalities. Therefore, withdrawal of the objection is respectfully requested.

Claims 1-4, 6-10 and 16-18 have been rejected under 35 U.S.C. § 102 as being anticipated by Lin. Claims 30 and 38-40 have been rejected under 35 U.S.C. § 102 as being

anticipated by Chen. Claims 1-8, 16-19 and 27-29 have been rejected under 35 U.S.C. § 103 as being obvious over the combination of Chen and Lin. Claims 8-15, 19-29, and 31-37 have been rejected under 35 U.S.C. § 103 over the combination of Chen, Sh and Glass. Applicant respectfully traverses these rejections and requests reconsideration of the claims, as amended.

Claims 11, 16-18, 22 and 33 have been cancelled.

Claim 1 has been amended to provide for a dead bolt installed between the side plates, a cam extending into a notch in the dead bolt, and a spring outside the dead bolt and engaging the cam so as to bias the dead bolt to either a locked or unlocked position. Neither Lin nor Chen meet these limitations of claim 1.

More particularly, the Lin patent shows a dead bolt 2 having a plate 4 attached thereto via a pin 22, and a cam 7 engaging a pair of tabs 42, 43 on the plate 4 so as to move the dead bolt 2 between locked and unlocked positions. Lin also shows a spring 8 engaging the cam 7. However, the cam 7 of Lin does not extend into a notch in the dead bolt 2, as required by claim 1. Also, the deadbolt 2 of Lin is not installed between two side plates, as required by claim 1. Rather, the dead bolt 2 of Lin is mounted in a cylindrical housing 1. The plates 5, 6 of Lin extend from the dead bolt housing 1, but the dead bolt 2 does not extend between the plates 5, 6. Only the central push/pull plate 4 of Lin (which is connected to the dead bolt 2) extends between the side plates 5, 6. Therefore, Lin does not anticipate claim 1.

Chen does not show the spring installed outside the dead bolt and engaging the cam, in accordance with claim 1. The Examiner asserts that it would be obvious to provide the spring of Lin and flat surfaces with the cam body of Chen, so as to bias the dead bolt at its locked and unlocked positions and to limit cam rotation (Office Action, page 4). However, for a proper § 103 obviousness rejection, there must be a clear and particular showing in the prior art leading to the combination. In re

Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999). In other words, there must be "some objective teaching" leading to the combination. In re Fritch, 972 F.2d 1260, 1265 (Fed. Cir. 1992). Here, there is no clear and particular objective teaching or showing in either Chen or Lin to combine these two references. While Lin discloses that the spring 8 assists rotation of the cam 7, as described at column 3, lines 2-5, there is no suggestion that such assistance is needed, or even desired, for rotating the cam 42 of Chen. Chen utilizes an internal spring 98 mounted within the dead bolt to bias the cam 42 into the locked and unlocked positions, as best seen in Figure 8, and as described in paragraph 31 (which refers to spring 90, rather than spring 98). Since Chen has an internal biasing spring, there is no need or motivation for providing an external biasing spring, as in Lin. Therefore, the alleged motivation to combine the references, as asserted by the Examiner, is absent from the references. Accordingly, there is no basis to combine Chen and Lin for an obviousness rejection.

Accordingly, claim 1 distinguishes over the cited references so as to be in proper form for allowance.

Independent claim 19 is similar to claim 8, in requiring that the dead bolt have a stop formed therein to limit rotation of the cam. As discussed above with respect to claim 8, none of the cited references have such an internal stop formed within the dead bolt to limit rotation of the cam. Accordingly, claim 19 distinguishes over the cited patents so as to be in proper form for allowance. Claims 20, 21 and 24-29 depend from claim 19, and should be allowable as depending from an allowable base claim.

As discussed above with respect to claim 1, the dead bolt of Lin is not installed between the side plates, as required by claim 8. Also, Lin does not have a stop formed within the dead bolt 2 in accordance with claim 8. Rather, the Lin stops 42, 43 are on the push plate 4, and not on the dead bolt 2. Therefore, Lin does not anticipate claim 8.

Chen also fails to have a stop formed in the dead bolt, as required by claim 8. To the contrary, in Chen, the stops 96 are exterior to the dead bolt 46, as seen in Figures 7-9. Thus, even if Chen and Lin are combined, as suggested by the Examiner, the combined references do not meet the limitations of claim 8 with regard to the stop being formed in the dead bolt. Neither Sh or Glass overcome the deficiencies of Chen and Lin. In Sh, there are no stops formed in the dead bolt 20. Rather, the Sh door lock is similar to Lin, with the dead bolt 20 mounted in a cylindrical housing 10, and a push plate 40 connected to the dead bolt 20 and actuated by a cam 70. The Glass patent also fails to show a stop in a dead bolt.

Therefore, claim 8 distinguishes over the cited references so as to be in proper form for allowance. Claims 9, 10, 12-15 depend from claim 8 and should be allowable as depending from an allowable base claim.

Independent claim 8 is directed towards a mortise lock having a pair of side plates, a cam, a dead bolt installed between the side plates, and "a stop formed in the dead bolt to engage the cam and thereby prevent lockout." Neither Lin nor Chen meet these limitations of claim 8.

Independent claim 30 is similar to claim 1, in requiring a spring outside the dead bolt to bias the dead bolt towards either the locked or unlocked positions. Claim 30 also requires that the dead bolt be mounted intermediate the side plates, similar to claim 1. The only reference cited against claim 30 is Chen, which does not have such an external spring outside of the dead bolt, as required by claim 30. Therefore, Chen does not anticipate claim 30. Furthermore, Lin does not overcome the deficiencies of Chen, for the reasons set forth above with respect to claim 1. Thus, the combination of Chen and Lin, as cited against claim 1, does not make claim 30 obvious.

Therefore, claim 30 and depending claims 31, 32 and 34-40 distinguish over the references so as to be in proper form for allowance.

New Claims

New independent claim 41 is directed towards a mortise lock wherein a dead bolt is mounted between a pair of side plates and having first and second notches, with a cam rotatably secured between the side plates. Claim 41 further requires that the cam have an arm extending into the first notch in the dead bolt and a finger extending from the arm into the second notch into the dead bolt to interconnect the cam and the dead bolt. This arm and finger structure of the cam is shown in Figure 7A, and is described in the Specification at page 6, line 27-page 7, line 5. Thus, claim 41 does not add any new matter.

Neither Chen nor Lin disclose the arm and finger structure for the cam, nor the first and second notches of the dead bolt, as required by claim 41. Therefore, claim 41 distinguishes over these references so as to be in proper form for allowance. Claims 42-46 depend from claim 41 and should be allowable as depending from an allowable base claim.

Conclusion

In view of the foregoing, Applicant respectfully requests that a Notice of Allowance be issued.

Please consider this a two-month extension of time from October 27, 2005 to December 27, 2005. Since this is a large entity, enclosed is our check in the amount of \$450.00 for this two-month extension of time. No other fees or extensions of time are believed to be due in connection with this amendment; however, consider this a request for any extension inadvertently omitted, and charge any additional fees to Deposit Account No. 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kirk M. Hartung", with a long horizontal flourish extending to the right.

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Enclosure: Replacement Drawing, check